



2540109_1.TXT

SEQUENCE LISTING

<110> Bukh, Jens
Purcell, Robert
Yanagi, Masayuki
Emerson, Suzanne

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<130> NIH257.001NP

<140> US 10/009,002

<141> 2003-01-14

<150> PCT/US00/15293

<151> 2000-06-02

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2540109_1.TXT

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 Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro
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 Ile Pro Lys Asp Arg Arg Ser Thr Gly Lys Ser Trp Gly Lys Pro Gly
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 Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Leu Gly Trp Ala Gly Trp
 85 90 95
 Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro Asn Asp Pro
 100 105 110
 Arg His Arg Ser Arg Asn Val Gly Lys Val Ile Asp Thr Leu Thr Cys
 115 120 125
 Gly Phe Ala Asp Leu Met Gly Tyr Ile Pro Val Val Gly Ala Pro Leu
 130 135 140
 Gly Gly Val Ala Arg Ala Leu Ala His Gly Val Arg Val Leu Glu Asp
 145 150 155 160
 Gly Val Asn Phe Ala Thr Gly Asn Leu Pro Gly Cys Ser Phe Ser Ile
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 Phe Leu Leu Ala Leu Leu Ser Cys Ile Thr Thr Pro Val Ser Ala Ala
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 Glu Val Lys Asn Ile Ser Thr Gly Tyr Met Val Thr Asn Asp Cys Thr
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 Asn Asp Ser Ile Thr Trp Gln Leu Gln Ala Ala Val Leu His Val Pro
 210 215 220
 Gly Cys Val Pro Cys Glu Lys Val Gly Asn Ala Ser Gln Cys Trp Ile
 225 230 235 240
 Pro Val Ser Pro Asn Val Ala Val Gln Arg Pro Gly Ala Leu Thr Gln
 245 250 255
 Gly Leu Arg Thr His Ile Asp Met Val Val Met Ser Ala Thr Leu Cys
 260 265 270
 Ser Ala Leu Tyr Val Gly Asp Leu Cys Gly Gly Val Met Leu Ala Ala
 275 280 285
 Gln Met Phe Ile Val Ser Pro Gln His His Trp Phe Val Gln Asp Cys
 290 295 300
 Asn Cys Ser Ile Tyr Pro Gly Thr Ile Thr Gly His Arg Met Ala Trp
 305 310 315 320
 Asp Met Met Met Asn Trp Ser Pro Thr Ala Thr Met Ile Leu Ala Tyr
 325 330 335
 Ala Met Arg Val Pro Glu Val Ile Ile Asp Ile Ile Ser Gly Ala His
 340 345 350
 Trp Gly Val Met Phe Gly Leu Ala Tyr Phe Ser Met Gln Gly Ala Trp
 355 360 365
 Ala Lys Val Val Val Ile Leu Leu Leu Ala Ala Gly Val Asp Ala Arg
 370 375 380
 Thr His Thr Val Gly Gly Ser Ala Ala Gln Thr Thr Gly Arg Leu Thr
 385 390 395 400
 Ser Leu Phe Asp Met Gly Pro Arg Gln Lys Ile Gln Leu Val Asn Thr
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Leu	His	Thr	Gly	Phe	Ile	Ala	Ser	Leu	Phe	Tyr	Thr	His	Ser	Phe	Asn
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Pro	Glu	Asp	Met	Arg	Pro	Tyr	Cys	Trp	His	Tyr	Pro	Pro	Arg	Gln	Cys
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Gly	Tyr	Thr	Lys	Thr	Cys	Gly	Ala	Pro	Pro	Cys	Arg	Thr	Arg	Ala	Asp
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Phe	Asn	Ala	Ser	Thr	Asp	Leu	Leu	Cys	Pro	Thr	Asp	Cys	Phe	Arg	Lys
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His	Pro	Asp	Thr	Thr	Tyr	Leu	Lys	Cys	Gly	Ser	Gly	Pro	Trp	Leu	Thr
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Phe	Met	Tyr	Gly	Leu	Ser	Pro	Ala	Leu	Thr	Lys	Tyr	Ile	Val	Arg	Trp
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Glu	Trp	Val	Ile	Leu	Leu	Phe	Leu	Leu	Leu	Ala	Asp	Ala	Arg	Val	Cys
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Ala	Cys	Leu	Trp	Met	Leu	Ile	Leu	Leu	Gly	Gln	Ala	Glu	Ala	Ala	Leu
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Ser	Leu	Leu	Leu	Leu	Ala	Leu	Pro	Gln	Gln	Ala	Tyr	Ala	Tyr	Asp	Ala
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		835					840					845			
Trp	Leu	Cys	Tyr	Leu	Leu	Thr	Leu	Gly	Glu	Ala	Met	Val	Gln	Glu	Trp
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Val	Ala	Ile	Phe	Tyr	Pro	Gly	Val	Val	Phe	Asp	Ile	Thr	Lys	Trp	Leu
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 Ser Asp Trp Ala Ala Ser Gly Leu Arg Asp Leu Ala Val Ala Val Glu
 965 970 975
 Pro Ile Ile Phe Ser Pro Met Glu Lys Lys Val Ile Val Trp Gly Ala
 980 985 990
 Glu Thr Ala Cys Gly Asp Ile Leu His Gly Leu Pro Val Ser Ala
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 Phe Leu Gly Thr Ser Ile Ser Gly Val Leu Trp Thr Val Tyr His Gly
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 Tyr Ser Ser Ala Glu Gly Asp Leu Val Gly Trp Pro Ser Pro Pro Gly
 1105 1110 1115 1120
 Thr Lys Ser Leu Glu Pro Cys Thr Cys Gly Ala Val Asp Leu Tyr Leu
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 1140 1145 1150
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 Ser Gly Gly Pro Val Leu Cys Pro Arg Gly His Ala Val Gly Val Phe
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 Thr Phe Thr Ile Thr Thr Gln Ile Val Pro Gln Asp Ala Val Ser Arg
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 1490 1495 1500
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 1555 1560 1565
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 1570 1575 1580
 Glu Asn Phe Ala Tyr Leu Thr Ala Tyr Gln Ala Thr Val Cys Ala Arg
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 1635 1640 1645
 Ile Ala Thr Cys Met Gln Ala Asp Leu Glu Val Met Thr Ser Thr Trp
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 Val Leu Ala Gly Gly Val Leu Ala Ala Val Ala Ala Tyr Cys Leu Ala
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 Thr Gly Cys Val Cys Ile Ile Gly Arg Leu His Ile Asn Gln Arg Ala
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 Val Val Ala Pro Asp Lys Glu Val Leu Tyr Glu Ala Phe Asp Glu Met
 1700 1705 1710
 Glu Glu Cys Ala Ser Arg Ala Ala Leu Ile Glu Glu Gly Gln Arg Ile
 1715 1720 1725
 Ala Glu Met Leu Lys Ser Lys Ile Gln Gly Leu Leu Gln Gln Ala Ser
 1730 1735 1740
 Lys Gln Ala Gln Asp Ile Gln Pro Thr Val Gln Ala Ser Trp Pro Lys
 1745 1750 1755 1760
 Val Glu Gln Phe Trp Ala Lys His Met Trp Asn Phe Ile Ser Gly Ile
 1765 1770 1775
 Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro Ala Val Ala
 1780 1785 1790
 Ser Met Met Ala Phe Ser Ala Ala Leu Thr Ser Pro Leu Ser Thr Ser
 1795 1800 1805
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 Ala Pro Pro Ala Gly Ala Thr Gly Phe Val Val Ser Gly Leu Val Gly
 1825 1830 1835 1840
 Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val Asp Ile Leu
 1845 1850 1855
 Ala Gly Tyr Gly Ala Gly Ile Ser Gly Ala Leu Val Ala Phe Lys Ile
 1860 1865 1870
 Met Ser Gly Glu Lys Pro Ser Met Glu Asp Val Val Asn Leu Leu Pro
 1875 1880 1885
 Gly Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Ile Cys Ala Ala
 1890 1895 1900
 Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val Gln Trp Met
 1905 1910 1915 1920
 Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val Ala Pro Thr

2540109_1.TXT

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 His Tyr Val Thr Glu Ser Asp Ala Ser Gln Arg Val Thr Gln Leu Leu
 1940 1945 1950
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 1955 1960 1965
 Thr Glu Asp Cys Pro Ile Pro Cys Gly Gly Ser Trp Leu Arg Asp Val
 1970 1975 1980
 Trp Asp Trp Val Cys Thr Ile Leu Thr Asp Phe Lys Asn Trp Leu Thr
 1985 1990 1995 2000
 Ser Lys Leu Phe Pro Lys Met Pro Gly Leu Pro Phe Val Ser Cys Gln
 2005 2010 2015
 Lys Gly Tyr Lys Gly Val Trp Ala Gly Thr Gly Ile Met Thr Thr Arg
 2020 2025 2030
 Cys Pro Cys Gly Ala Asn Ile Ser Gly Asn Val Arg Leu Gly Ser Met
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 Pro Ile Asn Cys Tyr Thr Glu Gly Gln Cys Val Pro Lys Pro Ala Pro
 2065 2070 2075 2080
 Asn Phe Lys Val Ala Ile Trp Arg Val Ala Ala Ser Glu Tyr Ala Glu
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 Val Thr Gln His Gly Ser Tyr His Tyr Ile Thr Gly Leu Thr Thr Asp
 2100 2105 2110
 Asn Leu Lys Val Pro Cys Gln Leu Pro Ser Pro Glu Phe Phe Ser Trp
 2115 2120 2125
 Val Asp Gly Val Gln Ile His Arg Phe Ala Pro Thr Pro Lys Pro Phe
 2130 2135 2140
 Phe Arg Asp Glu Val Ser Phe Cys Val Gly Leu Asn Ser Phe Val Val
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 Gly Ser Gln Leu Pro Cys Asp Pro Glu Pro Asp Thr Asp Val Leu Met
 2165 2170 2175
 Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr Ala Arg
 2180 2185 2190
 Arg Leu Ala Arg Gly Ser Pro Pro Ser Glu Ala Ser Ser Ser Ala Ser
 2195 2200 2205
 Gln Leu Ser Ala Pro Ser Leu Arg Ala Thr Cys Thr Thr His Gly Lys
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 2245 2250 2255
 Asp Pro Met Val Glu Glu Arg Ser Asp Leu Glu Pro Ser Ile Pro Ser
 2260 2265 2270
 Glu Tyr Met Leu Pro Lys Lys Arg Phe Pro Pro Ala Leu Pro Ala Trp
 2275 2280 2285
 Ala Arg Pro Asp Tyr Asn Pro Pro Leu Val Glu Ser Trp Lys Arg Pro
 2290 2295 2300
 Asp Tyr Gln Pro Ala Thr Val Ala Gly Cys Ala Leu Pro Pro Pro Arg
 2305 2310 2315 2320
 Lys Thr Pro Thr Pro Pro Arg Arg Arg Arg Thr Val Gly Leu Ser
 2325 2330 2335
 Glu Asp Ser Ile Gly Asp Ala Leu Gln Gln Leu Ala Ile Lys Ser Phe
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 Glu Thr Gly Ser Ile Ser Ser Met Pro Pro Leu Glu Gly Glu Leu Gly
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 Thr Gly Ala Leu Ile Thr Pro Cys Ser Pro Glu Glu Lys Leu Pro
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 Cys Thr Thr Thr Lys Ser Ala Ser Leu Arg Ala Lys Lys Val Thr Phe
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 Pro Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Asp Pro Thr
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 Gln Arg Val Glu Phe Leu Leu Lys Ala Trp Ala Glu Lys Lys Asp Pro
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 Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro Arg Pro Glu Tyr
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Lys Leu Thr Pro	Leu Pro Glu Ala Arg	Leu Leu Asp Leu Ser Ser Trp
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Phe Thr Val Gly	Ala Gly Gly Gly Asp Ile Tyr	His Ser Val Ser Arg
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<212> PRT

<213> Hepatitis C virus strain H77

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<212> PRT

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 Gln Ile Leu Pro Cys Ala Phe Thr Thr Leu Pro Ala Leu Ser Thr Gly
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 Leu Ile His Leu His Gln Asn Ile Val Asp Val Gln Tyr Leu Tyr Gly
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